



PL-2315 USB Portable Flash Disk Controller

OVERVIEW

PL-2315 integrated circuit is a full-speed Portable USB Flash Disk Controller. There are a hub, two mass-storage-class devices, and a “security device” integrated into this single chip. Up to four state-of-the-art NAND flash memories can be interfaced as its storage media. The required USB hub function is embedded to achieve the most cost-effective goal for multi-device solution.

The available NAND flash memories on board can be generally used as a normal single disk, or can be partitioned into a 1M-byte accessory disk (auxiliary mass storage device), and a main disk (primary mass storage device). To secure the privacy of the data, users have to pass the security check to get access to the main disk. Customers can pre-load the driver and the application program of the “security device” into the accessory disk to save an extra CD-ROM or floppy so to save the cost and to provide users more convenience.

To take advantage of Plug and Play, the mass storage device is implemented according to the USB mass storage class. Therefore, no extra driver is needed since the default driver is embedded within most of the current OS.

FEATURES

- Full compliance with the Universal Serial Bus Specification v1.1
- On chip USB transceiver and Serial Interface Engine (SIE)
- On chip 5V-3.3V 100mA regulator for USB interface and internal circuit
- High performance write over 600Kbyte/s and read over 900Kbyte/s
- Capable of interfacing up to four state-of-the-art NAND Flash Memories
- Embedded USB hub function for multi-device support
- Write/Remove protection switch is provided
- Security device included to secure the privacy of the data (customizable)
- Auxiliary mass storage device implemented
- Mass storage class compatible, no driver needed in MAC OS, Windows ME, 2000, NT or above
- Advanced power management mechanism.
- Package type: LQFP48pin.

BLACK DIAGRAM

